

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Please cancel claims 1-44 without prejudice and add new claims 45-90 as follows:

45. (New) A diagnostic assay for detecting the presence of at least one biomarker indicative of intra-amniotic inflammation in a sample of amniotic fluid, comprising (A) mixing an adsorbent that binds at least one biomarker associated with intra-amniotic inflammation with a sample of amniotic fluid and then (B) monitoring said mixture for binding between said biomarker and said adsorbent, wherein said assay detects at least one biomarker that is a calgranulin.

46. (New) A diagnostic assay as claimed in claim 45, wherein said adsorbent is an antibody immobilized on a solid substrate.

47. (New) A diagnostic assay as claimed in claim 46, which is an ELISA.

48. (New) A diagnostic assay as claimed in claim 46, wherein said solid substrate is a probe.

49. (New) A diagnostic assay as claimed in claim 48, wherein said biomarker is detected by laser desorption/ionization mass spectrometry.

50. (New) A diagnostic assay as claimed in claim 45, wherein said adsorbent is immobilized on a probe.

51. (New) A diagnostic assay as claimed in claim 50, wherein said adsorbent is a hydrophobic adsorbent.

52. (New) A diagnostic assay as claimed in claim 51, wherein said probe is a Ciphergen H4 probe or H50 probe.

53. (New) A diagnostic assay as claimed in claim 45, which additionally tests for the presence of at least one defensin in said sample of amniotic fluid.

54. (New) A diagnostic assay as claimed in claim 53, wherein said defensin is HNP-1 (alpha-defensin 1).

55. (New) A diagnostic assay as claimed in claim 47, which additionally tests for the presence of at least defensin in said sample of amniotic fluid.

56. (New) A diagnostic assay as claimed in claim 55, wherein said defensin is HNP-1 (alpha-defensin 1).

57. (New) A diagnostic assay as claimed in claim 50, which additionally tests for the presence of at least defensin in said sample of amniotic fluid.

58. (New) A diagnostic assay as claimed in claim 57, wherein said defensin is HNP-1 (alpha-defensin 1).

59. (New) A diagnostic assay as claimed in claim 45, wherein said calgranulin is calgranulin A.

60. (New) A diagnostic assay as claimed in claim 45, wherein said calgranulin is calgranulin C.

61. (New) A kit for detecting the presence of at least one biomarker indicative of intra-amniotic inflammation in a sample of amniotic fluid, comprising:

at least one adsorbent that binds at least one biomarker associated with intra-amniotic inflammation;
and

instructions for mixing said adsorbent with a sample of amniotic fluid and monitoring said mixture for binding between said adsorbent and a biomarker in said sample,

wherein said kit includes at least one adsorbent that detects a calgranulin.

62. (New) A kit as claimed in claim 61, wherein said adsorbent is an, antibody is immobilized on a solid substrate.

63. (New) A kit as claimed in claim 62, which additionally comprises an enzyme-antibody conjugate used to detect biomarker immobilized on said solid substrate.

64. (New) A kit as claimed in claim 61, wherein said solid substrate is a probe.

65. (New) A kit as claimed in claim 64, wherein said kit instructions specify analysis by laser desorption/ionization mass spectrometry.

66. (New) A kit as claimed in claim 62, wherein said solid substrate is a probe.

67. (New) A kit as claimed in claim 66, wherein said adsorbent is a hydrophobic adsorbent.
68. (New) A kit as claimed in claim 67, wherein said probe is a CIPHERGEN H4 probe or H50 probe.
69. (New) A kit as claimed in claim 61, additionally comprising at least one adsorbent that binds to at least one defensin.
70. (New) A kit as claimed in claim 69, wherein said defensin is HNP-1 (alpha-defensin 1).
71. (New) A kit as claimed in claim 63, which additionally comprising at least one adsorbent that binds to at least one defensin.
72. (New) A kit as claimed in claim 71, wherein said defensin is HNP-1.
73. (New) A kit as claimed in claim 65, which additionally comprising at least one adsorbent that binds to a defensin.
74. (New) A kit as claimed in claim 73, wherein said defensin is HNP-1 (alpha-defensin 1).
75. (New) A kit as claimed in claim 61, wherein said calgranulin is calgranulin A.
76. (New) A kit as claimed in claim 61, wherein said calgranulin is calgranulin C.
77. (New) A method for qualifying the risk of preterm delivery in a pregnant patient, comprised of analyzing a sample of amniotic fluid from said patient for a level of at least one calgranulin.
78. (New) A method according to claim 77, additionally comprising analyzing said sample for the level of at least one defensin.
79. (New) A method according to claim 77, wherein said calgranulin is calgranulin A or calgranulin C.
80. (New) A method according to claim 78, wherein said defensin is HNP-1 (alpha-defensin 1) or HNP-2 (alpha-defensin 2).
81. (New) A method according to claim 80, wherein said defensin is HNP-1 (alpha-defensin 1).

82. (New) A method for qualifying the risk of preterm delivery in a pregnant patient, comprising

(A) providing a spectrum generated by subjecting a sample of amniotic fluid from said patient to mass spectroscopic analysis that includes profiling on a biologically- or chemically-derivatized affinity surface and

(B) putting said spectrum through pattern-recognition analysis that is keyed to at least one peak indicative of the presence of a calgranulin in said sample.

83. (New) A method according to claim 82, wherein said pattern-recognition analysis additionally is keyed to at least one peak indicative of a defensin.

84. (New) A method according to claim 82, wherein said calgranulin is calgranulin A or calgranulin C.

85. (New) A method according to claim 83, wherein said defensin is HNP-1 (alpha-defensin 1) or HNP-2 (alpha-defensin 2).

86. (New) A method according to claim 85, wherein said defensin is HNP-1 (apha-defensin 1).

87. (New) A method according to claim 85, wherein said calgranulin is calgranulin A or calgranulin C.

88. (New) A method according to claim 86, wherein said calgranulin is calgranulin A or calgranulin C.

89. (New) A method according to claim 82, wherein said chemically-derivatized affinity surface is a CIPHERGEN H4 probe or H50 probe.

90. (New) A method according to claim 82, wherein said patient does not have a white blood cell count that is elevated out of the normal range.